

Chapter 4. SUBDIVISIONS AND INFRASTRUCTURE

4.1 Purpose and Intent

The purpose of this chapter is to establish procedures and standards for the proper subdivision of land within the jurisdiction of the City of Salisbury in order to provide for orderly growth and development; for the coordination of streets and highways within proposed subdivisions with existing or planned streets and highways and with other public facilities; to provide for the dedication of rights-of-way or easements for street and utility purposes; and to provide for the distribution of traffic in a manner that will avoid congestion and will create conditions essential to the public health, safety, and general welfare.

In addition, this chapter is guided by and intends to fulfill the following policy directives of the *Salisbury Vision 2020 Comprehensive Plan*:

- *New neighborhood streets and minor streets shall be no wider than necessary to serve their intended purpose. Street widths shall be designed to fit the intended use of the street, corresponding to the traffic load and the planned development types.*
- *Street designs in new neighborhoods shall give equal priority to the pedestrian and the automobile. In newly developing areas, sidewalks shall be required as an integral part of the community's basic infrastructure. Except where constrained by unusual physical limitations, a minimum sidewalk width of five feet shall be required. Except where constrained by physical limitations or other obvious reasons, sidewalks shall be required on both sides of the street.*
- *Bikeways shall be planned for as a system-wide component of Salisbury's transportation planning. New neighborhoods shall recognize bike routes at the time of development. All future subdivision plats and site plans shall be examined for bicycle compatibility and conformity with the city-wide bikeway plan.*
- *The City shall encourage street patterns that respond to site topography, accentuate focal points and interesting vistas, create interesting public spaces and intersections, and that are coordinated with the placement of significant structures or open spaces.*
- *On-street parking shall be encouraged in compact neighborhoods.*
- *The turning radius of corners at intersections involving minor streets shall be as small as possible while allowing for reasonable truck and emergency vehicle maneuvering.*
- *New neighborhoods shall be connected to other residential, shopping, and work areas within the neighborhood planning area. A fully connected honeycomb of streets shall provide convenient circulation within the neighborhood and provide for multiple, alternative outlets from the area to adjoining neighborhoods and major streets. Care shall be taken that the creation of cut-through traffic routes is avoided.*
- *Access to major streets shall be from intersecting minor streets rather than private driveways, whenever possible. Minor streets should be located so as to intersect with major streets at regularly spaced, reasonably frequent intervals.*

4.1 Purpose and Intent
4.2 General Subdivision Platting Provisions
4.3 Specific Subdivision Types by District
4.4 Required Improvements
4.5 Installation of Infrastructure Improvements (Subdv & Site)
4.6 Permanent Reference Points
4.7 Street Design & Layout Provisions
4.8 Street Sections
4.9 Sidewalk Program
4.10 Connectivity & Street Stubs
4.11 Traffic Calming
4.12 Bicycle Accommodations
4.13 Access Management
4.14 Transportation Impact Analysis

4.2 General Subdivision Platting Provisions

These provisions shall apply to the subdivision of property by means of an Exception Plat, Minor Subdivision, or Major Subdivision.

- A. All Lots to Front on Street or Public Space:** All lots shall front upon a public street, or with the provision of alley access, lots may front upon recreational open space as defined by this Ordinance.
- B. Side Lot Lines:** Side lot lines shall be substantially at right angles or radial to street lines.
- C. Flag Lots:** Flag (or “pipestem”) lots are prohibited in all zoning districts except the OSP and the RR districts, where they shall be allowed if the width of the stem is at least sixty (60) feet.
- D. Double Frontage Lots:** Double frontage lots should be avoided. However, on lots having frontage on two streets and not located on a corner, the minimum front yard shall be provided on each street in accordance with the provisions of this Ordinance. On lots having frontage on more than two streets, the minimum front yard shall be provided in accordance with the regulations set forth in this Ordinance on at least two of the street frontages. The minimum front yard on the remaining frontage may be reduced in accordance with the street side yard requirements of the district. When a double frontage lot has frontage along a Thoroughfare, access to the lot shall be via the non-thoroughfare frontage.
- E. Residential Buffer Strips:** In residential developments in residential districts (RR, GR, UR, HR) a buffer strip of at least fifty (50) feet in depth in addition to the normal lot depth shall be provided adjacent to all railroads and limited access highways. This strip shall be a part of the platted lots, but shall have the following restriction lettered on the face of the plat: "This strip reserved for the planting of trees or shrubs by the owners; the building of structures hereon is prohibited."
- F. Easements:** Utility and other easements shall be provided as follows:

 - 1. Utility Easements:** Utility easements centered on rear or side lot lines shall be provided where necessary and shall be at least (10) feet in width.
 - 2. Watercourses:** Where a subdivision is traversed by a watercourse, drainageway, channel, or stream, there shall be provided a storm water easement conforming substantially to the lines of such watercourse, and such further width of construction, or both, shall be in accordance with the adopted *Uniform Construction Standards* of the City of Salisbury.
- G. Street Names:** Proposed streets names are subject to the approval of Rowan County. Proposed streets which are clearly in alignment with other existing streets shall bear the assigned name of the existing street.

4.3 Specific Subdivision Types by District

- A. Conservation Neighborhood:** Except for the individual building constructed on the minimum lot size required, the Conservation Neighborhood is the only common plan of residential development permitted in the OSP district.

The Conservation Neighborhood offers property owners a way to maintain land in the OSP district as largely undeveloped. Conservation Neighborhoods may be approved by the Administrator upon a finding that all requirements of this section have been met.

	Minimum Subdivision Acreage	Maximum Density	Maximum Dwelling Units
Conservation Neighborhood	40 acres	20 acres per dwelling unit	6

1. Owners shall establish an irrevocable conservation easement held by a conservation organization (as authorized by US 150(h); 20559(a) and NCGS 124-34 et seq.) and shall provide the City with a boundary description of the area under the conservation easement.
2. In a Conservation Neighborhood, land set aside for detached houses shall be specified in the easement and shall be the minimum size necessary to allow construction of the house.
3. **Access and Right-of-Ways:** No new public streets may be created. All buildings within the Conservation Neighborhood shall have permanent access by way of a public road frontage or a 20-ft wide access easement connecting to a public right-of-way. Where the tract abuts or includes a segment of a public street, thoroughfare, or greenway as shown on an adopted plan, the developer shall provide for these improvements either by deed or plat map. However, the developer shall not be required to construct any of these improvements.
4. The tract shall preserve the rural appearance of the land from the view of public roads and abutting properties.
5. Only structures and uses identified as acceptable by the conservation organization will be allowed on the property.
6. **Required Improvements:** The Conservation Neighborhood shall be exempt from the requirements of Chapter 7: Recreational Open Space, Chapter 8: Landscaping and Section 4.4: Required Infrastructure Improvements.
7. In a Conservation Neighborhood, there shall be no further subdivision of lots without the consent of all landowners and easement holders and approval of the Administrator.

- B. Rural Subdivision:** Except for the individual building constructed on the minimum lot size required, the Rural Subdivision is the only common plan of residential development permitted in the RR district.

The Rural Subdivision offers property owners a way to maintain land in the RR district as largely undeveloped and rural or agricultural in character. Rural Subdivisions may be approved by the Administrator upon a finding that all requirements of this section have been met.

	Minimum Subdivision Acreage	Maximum Density	Minimum Undeveloped Land
Rural Subdivision	40 acres	1 unit per 2 gross acres	50%

1. There shall be no maximum or minimum lot size.
2. A minimum of 50% of the area of the subdivision shall remain undeveloped and/or used for agricultural uses. Undeveloped areas shall connect to undeveloped land or recreational open space on adjacent parcels. If the development includes a homeowners association, the association may own the development's undeveloped land. Otherwise, the undeveloped land may be privately held, as long as a permanent conservation easement is placed on the land. Alternatively, it may be owned by a land conservancy, or other entities proposed by the City.
3. Streets within a rural subdivision shall use the rural road cross-section, per Section 4.8 of this Ordinance.
4. A notice shall be placed on the subdivision plat stating that further subdivision is not allowed. The developer waives the right to further statutory subdivision.

4.4 Required Infrastructure Improvements (Subdivisions & Site Development)

- A.** In addition to the standards found elsewhere in this Ordinance, all development shall install or provide the following improvements, as applicable. All infrastructure shall be designed and constructed in accordance with the City of Salisbury *Uniform Construction Standards Manual*.
- Water supply distribution and fire hydrants
 - Sanitary sewer
 - Streets (paved) and other public rights-of-ways (e.g., greenway paths)
 - Easements
 - Sidewalks
 - Curb and gutter
 - Street lighting (upgraded or decorative)
 - Wiring (All utilities serving new development shall be underground.)
 - Dedicated recreational open space (in residential districts)
 - Landscaping (Including Supplemental Tree Plantings, such as Street Trees)
 - Storm drainage infrastructure
 - Special street signs and other traffic control devices in accordance with the Manual of Uniform Traffic Control Devices, latest edition
- B.** Proposed subdivisions or any new development with frontage on existing publicly maintained streets shall upgrade those streets with the following elements:
- Sidewalks along the applicable parcel(s) street frontage, per Sections 4.7 and 4.9
 - A definable pedestrian connection shall be provided from a primary building entrance to the fronting public sidewalk system
 - Street Trees, if applicable per Section 4.7
 - Right-of-way Reservation

4.5 Installation of Improvements

- A. Improvement Guarantees:** Approval of the final plat shall be subject to the subdivider having installed the improvements designated on the approved engineering drawings or having guaranteed, to the satisfaction of the city, the installation of said improvements. Improvement guarantees shall be valid for a period of two (2) years. Upon acceptance of the street(s) and all public utilities, sidewalks may be guaranteed for an additional period not to exceed two (2) years.

Where the required improvements have not been completed prior to the submission of the plat for final approval, the approval of said plat shall be subject to the subdivider guaranteeing the installation of the improvements in one of the following methods:

1. Filing a performance or surety bond in an amount to be determined by the subdivision administrator. The amount shall be 125% of the city's estimated cost of construction, but in no case shall be less than five thousand dollars (\$5,000.00).
2. Depositing or placing in escrow a certified check or cash in an amount to be determined by the subdivision administrator as noted above. Portions of the security deposit may be released as work progresses.

B. Improvements within the City Limits:

1. **Street and sidewalk improvements and storm drainage:** Streets and sidewalks shall be constructed within all proposed street rights-of-way. All streets, sidewalks, and storm drainage shall be installed in accordance with approved engineering drawings and the adopted *Uniform Construction Standards* of the City of Salisbury. Streets and sidewalks shall be extended within existing rights-of-way as needed to provide publicly maintained street frontage to all newly created lots; however, construction standards may be modified to coincide with an existing publicly maintained street stub, if applicable.
2. **Utilities:** If any portion of the original property is located within two hundred (200) feet of a public sanitary sewer main, or within three hundred (300) feet of a public water main, the subdivider shall provide for public service to all newly created lots to the furthest extent of the property boundary. Sanitary sewers and water mains shall be installed in accordance with approved engineering drawings and the adopted *Uniform Construction Standards* of the City of Salisbury. Should private water and sewerage systems be allowed, such shall meet the requirements of the North Carolina State Department of Environment and Natural Resources (DENR) and the North Carolina Utilities Commission, as applicable.

C. Improvements beyond the City Limit:

1. **General provision:** The approval of a plat shall not be deemed to constitute or affect the acceptance by the City (or public) the dedication of any street or other ground, public utility line or other public facility shown on the plat. The city council may by resolution accept any dedication made to the public of lands or facilities for streets, parks, public utility lines, or other public purposes when the lands or facilities are located within its subdivision regulations jurisdiction. Acceptance of dedication of lands or facilities located within the subdivision regulation jurisdiction but outside the corporate limits of the city shall not place on the city any duty to open, operate, repair, or maintain any street, utility line, or other land or facility, and the city shall in no event be held to answer in any civil action or proceeding for failure to open, repair, or maintain any street located outside its corporate limits. Sidewalk maintenance and repair shall be the responsibility of the homeowners association or adjacent property owners.
2. **Improvements required:** All street improvements and such applicable improvements as sidewalks, storm sewers, sanitary sewers, and water mains shall be installed in accordance with the requirements of the City of Salisbury. The right-of-way, design and construction of streets and street drainage shall also be reviewed and approved by the district engineer of the division of highways.

- D. Major Improvements:** Where official plans of the City of Salisbury call for major thoroughfares, interceptor sewer lines or water mains, such improvements shall be made by the developer in accordance with the stated Ordinances and policies of the City of Salisbury.

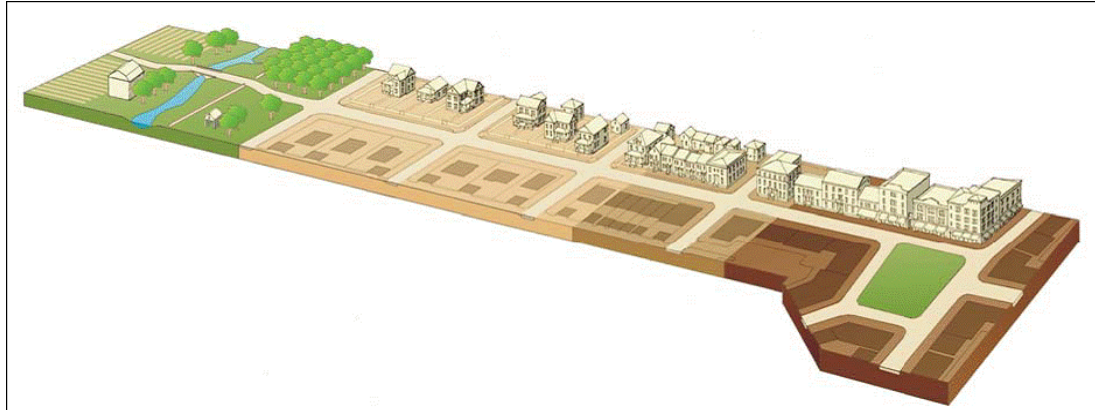
4.6 Permanent Reference Points

Prior to the approval of the final plat for any conventional subdivision, permanent reference points shall have been placed in accordance with the following requirements:

- A. Subdivision corner tie:** At least one (1) corner of the subdivision shall be accurately tied to and coordinated with a horizontal control monument in accordance with the North Carolina Administrative Code, Standards and Practice for Land Surveying. The subdivision corner tie may also serve as one of the control corners listed below.
- B. Control corners:** At least three (3) control corners shall be established in accordance with G.S. 39-32.1, 39-32.2 and 39-32.3, and clearly identified on the final plat. All monuments shall be constructed of concrete and shall be at least four (4) inches in diameter or square and not less than three (3) feet in length. Each monument shall have imbedded in and flush with its top to serve as the point a metal rod capable of being detected by standard surveying means. Such monuments shall be set at least thirty (30) inches in the ground with six (6) inches exposed above the ground unless this requirement is impractical because of traffic or other factors. The surveyor shall employ additional monuments if and when required.
- C. Property markers:** A steel or wrought iron pipe or the equivalent not less than one-half (1/2) inch in diameter and at least twenty-four (24) inches in length shall be set at all corners, except those located by monuments. A marker shall also be set at a point of curve, point of intersection, property corner, point of tangency, reference point and tangent unless a monument has already been placed at these points. Additional markers shall be placed at other points of importance if and when required.
- D. Accuracy:** Land surveys within the corporate limits shall meet the standards of Class A surveys, and beyond the corporate limits, Class B surveys, as defined by the North Carolina Administrative Code, Standards and Practice for Land Surveying.

4.7 Street Design & Layout Provisions

New streets within the City of Salisbury zoning jurisdiction shall be constructed in accordance with the following provisions. Additional detail of each provision follows the matrix.



	OSP	RR	GR MHD	UR HR RMX TND	NMX CMX	DMX TND	HB LI HI HS IC
Curb Type	n/a	Optional	Rolled, Valley, or Vertical	Vertical	Vertical	Vertical	Vertical
Drainage Type	Swale	Swale or Closed	Closed	Closed	Closed	Closed	Closed
Curb Radius	30'	30'no curb 20'w/curb	20'	20': unmark 10': marked	20': unmark 10': marked	10'	30'
On-Street Parking	n/a	n/a	Unmarked	Unmarked or Marked	Unmarked or Marked	Marked	Unmarked or Marked
Sidewalk	Optional Path	Optional Path	Sidewalk min. 5'	Sidewalk min. 5'	Sidewalk min. 5'	Sidewalk min. 8'	Sidewalk min. 5'
Street Trees	n/a	n/a	Planting Strip	Planting Strip or Tree Well	Planting Strip or Tree Well	Tree Well	See Sec. 8.8
Street Lighting	n/a	n/a	Vehicular or Pedestrian Scale	Pedestrian Scale	Pedestrian Scale	Pedestrian Scale	Vehicular or Pedestrian Scale*
Block Length	n/a	n/a	1200' max. 800' avg.	800' max. 600' avg.	800' max. 600' avg.	600' max. 400' avg.	1200' max. 800' avg.
Cul-de-sac or Close Length	800' max.	600' max.	600' max.	300' max.	Prohibited	Prohibited	800' max.

A. Streets and Street Layout

1. All streets designed for inclusion in the NCDOT system are subject to approval by the City and by NCDOT.
2. Streets shall interconnect within a development and with adjoining development. Where future development is anticipated, streets shall stub to adjacent property to provide for future connections per Section 4.8, Connectivity & Street Stubs.
3. No more than 30 single-family or duplex dwelling units shall be accessed from a street system having a single access point unless a street stub or future connection is provided.
4. Where property is adjacent to a designated thoroughfare, existing or proposed, building setbacks or build-to lines shall be measured from the future right-of-way as identified in the adopted thoroughfare plan; however, this provision does not require dedication of land needed to meet the future right-of-way width.
5. Street layout shall conform to the arrangement, width and location of public streets and corridors indicated on the regulating Thoroughfare Plan for the area. Streets not indicated on that plan should be designed and located to:
 - a. Relate to the topography;
 - b. Preserve natural features such as streams and tree growth;
 - c. Provide for adequate public safety and convenience.
6. Private or gated streets are prohibited.
7. Street Markers and Traffic Control Signs:
 - a. All standard street markers and traffic control signs on public streets shall be provided and installed by the City. Custom or decorative markers or signposts proposed by the developer are subject to approval by the Administrator prior to installation. The developer is responsible for all costs associated with the use of custom or decorative materials.
 - b. Installation of “No Parking” signs and speed limit signs (other than 35 mph speed limit signs) on streets constructed by private developers shall be the responsibility of the developer. The appropriate locations and materials of such signs shall be subject to the approval of the Administrator.

B. Alleys

1. Alleys shall be within privately owned and maintained easements or common areas. They shall be designated as public access easements and shall be marked as such on all plats.

2. Alleys shall be paved or prepared, depending on use, as defined in Sec. 10.4.C of this Ordinance.
3. Alleys shall be constructed with standard concrete driveway ramps at entrances to streets. Driveway standards shall be as specified in the *Uniform Construction Standards Manual*.

C. Curb and Gutter

1. Curb and gutter shall be constructed in accordance with the City of Salisbury *Uniform Construction Standards Manual*.
2. Where vertical curb and gutter is specified, it shall be a minimum of 1.5 feet wide for residential development and 2.5 feet wide for non-residential or mixed-use development.

D. Sidewalks

1. Mixed use and commercial area sidewalks shall have a minimum width of 8 feet in the DMX and TND districts, unless otherwise specified by a Council-adopted area plan for all other districts.
2. Sidewalks are not required around the “bulb” portion of a permanently dead-ended cul-de-sac.
3. All sidewalks shall be paved with broom-finished concrete, paving brick or concrete pavers. Similar materials may be considered on a case-by-case basis.
4. Refer to Section 4.9, Sidewalk Program, for sidewalk alternatives along existing publicly-maintained streets.

E. Street Trees

All street trees shall be installed in accordance with the City of Salisbury *Uniform Construction Standards Manual* and the provisions of Chapter 8, Landscaping.

F. Street Lighting

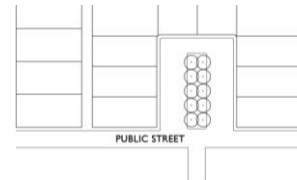
Street lights shall be selected from the adopted Streetlight Inventory List* and shall be installed on both sides of applicable newly-constructed public streets. The developer is responsible for all costs associated with streetlight installation.

G. Block Length

1. On one-way minor streets where on-street parking is allowed, blocks shall be no longer than 300 feet or they shall provide areas of 40 feet in length where no parking is allowed every 200 feet. These areas are to be used for emergency access staging.
2. **Exceptions:** OSP, RR, IC, LI, and HI districts are exempt from the block length provisions of this subsection.

H. Cul-de-Sacs and Closes

1. Any permanent dead-end streets or cul-de-sac shall comply with the length limits shown in the above Section 4.7 table.
2. A close may be used in place of a cul-de-sac.

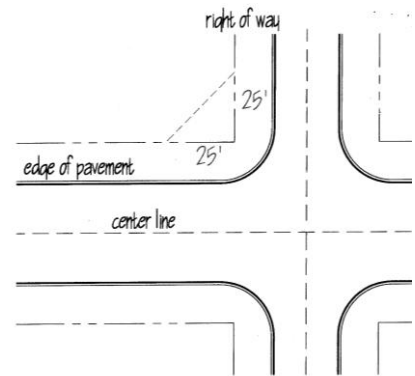


Close – an alternative to cul-de-sacs

I. Intersections

1. All streets shall intersect at right angles as nearly as possible and no street shall intersect at less than 60 degrees.
2. Where practical, intersections should be aligned to create four-way intersections.
3. **Intersection Offsets:** Intersections with major thoroughfares shall have a centerline offset of at least 400 feet. Intersections on other streets shall have centerline offset of at least 150 feet.

4. **Sight Triangles:** On a corner lot in any district, no planting, structure, fence, wall or obstruction to vision more than three (3) feet in height measured from the respective street center lines shall be placed or maintained with the triangular area formed by the intersection of the street lines (right-of-way) and a straight line connecting points on said street lines, each of which is twenty-five (25) feet distant from the point of intersection. NCDOT standards may also apply.

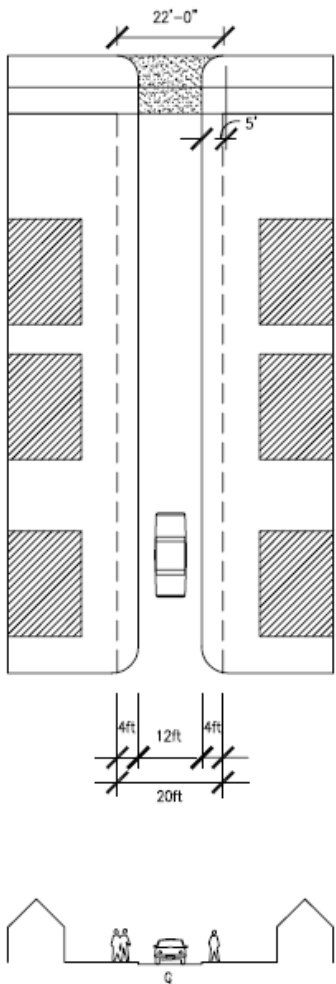
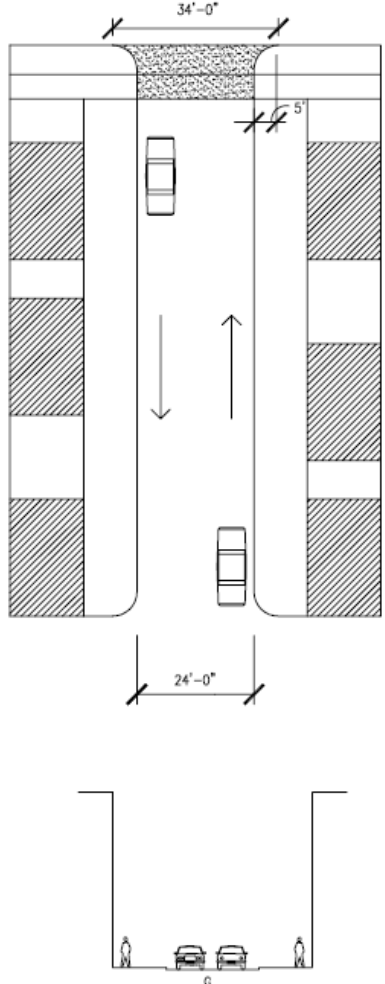


Sight triangles are not required in the NMX, RMX, TND, and DMX districts at intersections with all-way stops or traffic signals.

5. Curb extensions to demarcate parking areas and to narrow the street width at intersections are encouraged.
6. A median island located in the center of a street shall not be considered an intersection; however, this treatment can be used as a horizontal traffic calming measure.

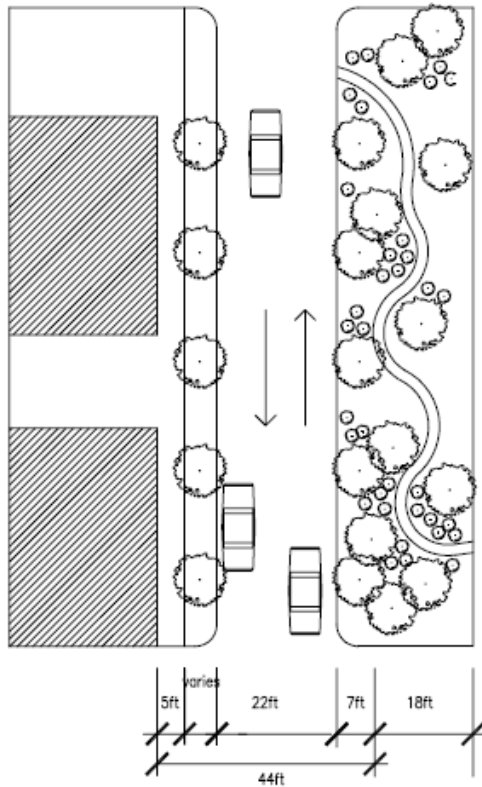
4.8 Street Sections

The following street cross sections are permitted in accordance with the street hierarchy detailed as follows. NCDOT approval is required in the ETJ. All street cross sections are based on required minimums. Enlarged dimensions are permitted where desired or necessary.

A. RESIDENTIAL ALLEY 20-ft Easement	B. COMMERCIAL ALLEY 24-ft Easement																																								
																																									
<table border="0"> <tr> <td>Easement Width</td><td>20 ft</td></tr> <tr> <td>Travel Width</td><td>12 ft</td></tr> <tr> <td>Traffic Movement</td><td>2-Way Yield</td></tr> <tr> <td>Curb Radius</td><td>5 ft</td></tr> <tr> <td>Curb Type</td><td>None</td></tr> <tr> <td>Drainage</td><td>Designer discretion</td></tr> <tr> <td>Parking</td><td>None</td></tr> <tr> <td>Planter Type</td><td>None</td></tr> <tr> <td>Street Trees</td><td>None</td></tr> <tr> <td>Sidewalks</td><td>None</td></tr> </table>	Easement Width	20 ft	Travel Width	12 ft	Traffic Movement	2-Way Yield	Curb Radius	5 ft	Curb Type	None	Drainage	Designer discretion	Parking	None	Planter Type	None	Street Trees	None	Sidewalks	None	<table border="0"> <tr> <td>Easement Width</td><td>24 ft</td></tr> <tr> <td>Pavement Width</td><td>24 ft</td></tr> <tr> <td>Traffic Movement</td><td>2-Way</td></tr> <tr> <td>Curb Radius</td><td>5 ft</td></tr> <tr> <td>Curb Type</td><td>None</td></tr> <tr> <td>Drainage</td><td>Designer discretion</td></tr> <tr> <td>Parking</td><td>None</td></tr> <tr> <td>Planter Type</td><td>None</td></tr> <tr> <td>Street Trees</td><td>None</td></tr> <tr> <td>Sidewalks</td><td>None</td></tr> </table>	Easement Width	24 ft	Pavement Width	24 ft	Traffic Movement	2-Way	Curb Radius	5 ft	Curb Type	None	Drainage	Designer discretion	Parking	None	Planter Type	None	Street Trees	None	Sidewalks	None
Easement Width	20 ft																																								
Travel Width	12 ft																																								
Traffic Movement	2-Way Yield																																								
Curb Radius	5 ft																																								
Curb Type	None																																								
Drainage	Designer discretion																																								
Parking	None																																								
Planter Type	None																																								
Street Trees	None																																								
Sidewalks	None																																								
Easement Width	24 ft																																								
Pavement Width	24 ft																																								
Traffic Movement	2-Way																																								
Curb Radius	5 ft																																								
Curb Type	None																																								
Drainage	Designer discretion																																								
Parking	None																																								
Planter Type	None																																								
Street Trees	None																																								
Sidewalks	None																																								

C. PARKSIDE DRIVE

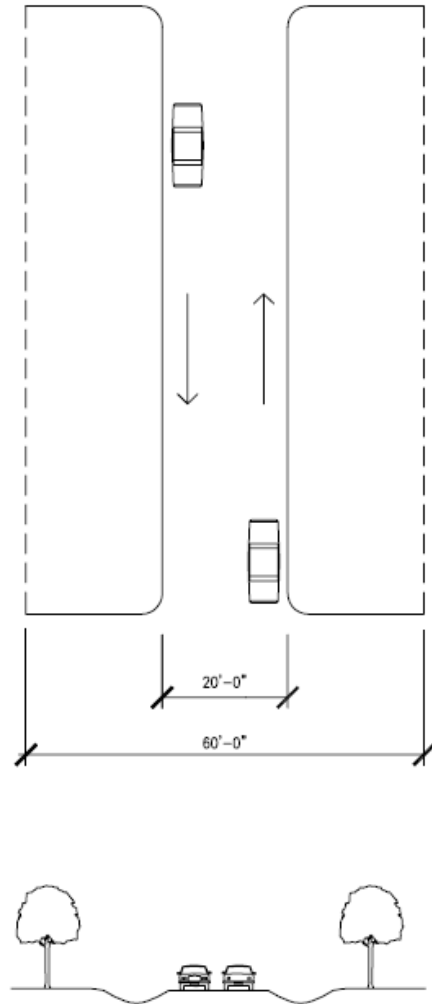
44-ft ROW



Total ROW Width	44 ft
Pavement Width	22 ft
Traffic Movement	2-Way
Curb Radius	20 ft
Curb Type	District-dependent
Drainage	Closed
Parking	Unmarked
Planter Type	Continuous Strip
Street Trees	Non-park side if req'd
Sidewalks	Non-park side
Parkside Width	18-ft. min.

D. RURAL ROAD

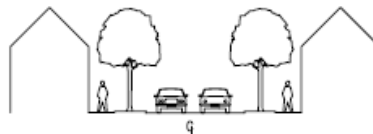
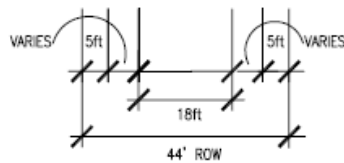
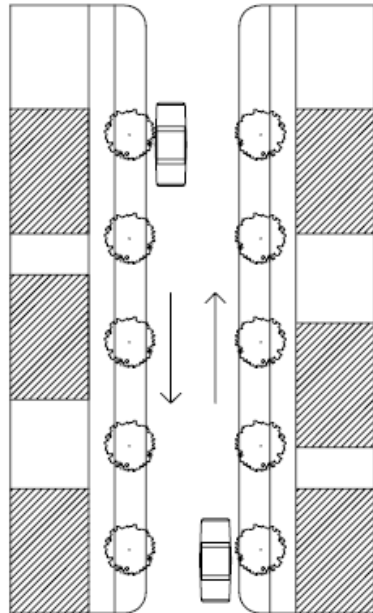
60-ft ROW



Total ROW Width	60 ft
Pavement Width	20 ft
Traffic Movement	2-Way
Curb Radius	20-30 ft
Curb Type	Optional
Drainage	Grassed Swale
Parking	None
Planter Type	Continuous Swale
Street Trees	Not required
Sidewalks	Not required; min. 5 ft. multi-use path optional

E. MINOR STREET

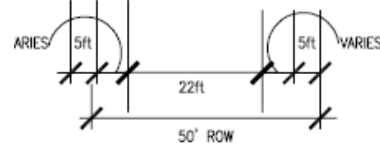
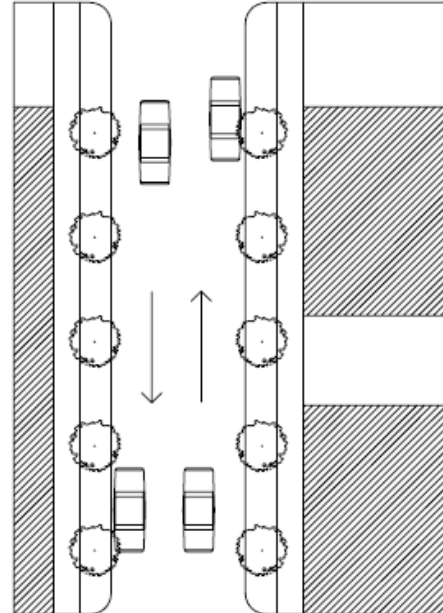
44-ft ROW



Total ROW Width	44 ft
Pavement Width	18 ft
Traffic Movement	2-Way or 1-Way
Curb Radius	20 ft
Curb Type	District-dependent
Drainage	Closed
Parking	Prohibited 2-Way Unmarked 1-Way
Planter Type	Continuous Strip
Street Trees	Both sides if required
Sidewalks	Both sides
Posted Speed	25 mph

F. LOCAL STREET

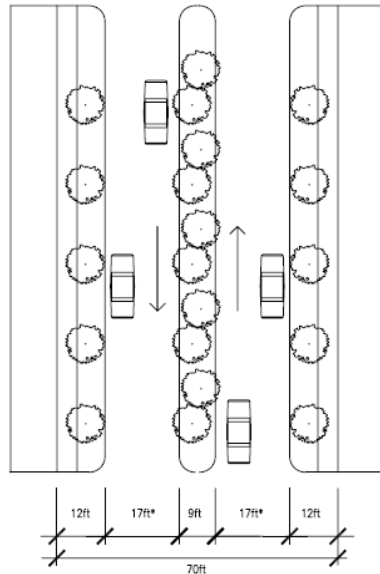
50-ft ROW



Total ROW Width	50 ft
Pavement Width	22 ft
Traffic Movement	2-Way
Curb Radius	20 ft
Curb Type	District-dependent
Drainage	Closed
Parking	Unmarked
Planter Type	Continuous Strip
Street Trees	Both sides if required
Sidewalks	Both sides

G. NEIGHBORHOOD AVENUE

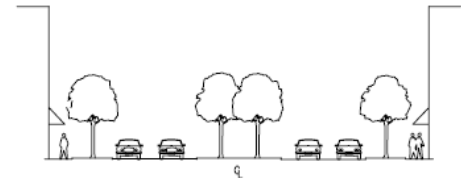
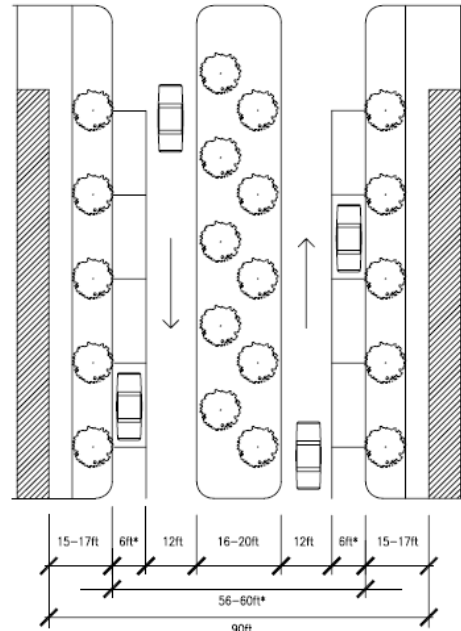
70-ft ROW



Total ROW Width	55 ft
Pavement Width	17 ft each side of median
Traffic Movement	1-Way each side of median
Curb Radius	20 ft
Curb Type	District-dependent
Drainage	Closed
Parking	Unmarked
Planter Type	Continuous Strip
Street Trees	Only Required in median
Sidewalks	Both sides

H. AVENUE

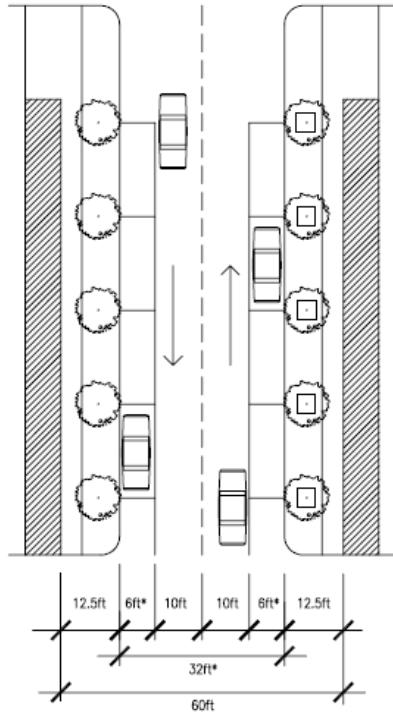
90-ft ROW



Total ROW Width	90 ft
Pavement Width	18 ft each side of median
Traffic Movement	1-Way each side of median
Curb Radius	10 ft
Curb Type	2.5' Vertical
Drainage	Closed
Parking	Marked
Planter Type	District-dependent
Street Trees	Both sides if required
Sidewalks	Both sides

I. RESIDENTIAL MAIN STREET

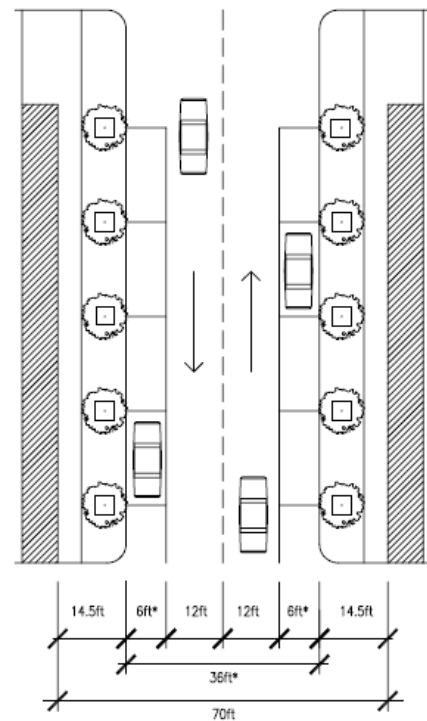
60-ft ROW



Total ROW Width	60 ft
Pavement Width	32 ft
Traffic Movement	2-Way
Curb Radius	10 ft
Curb Type	2.5' Vertical
Drainage	Closed
Parking	Marked
Planter Type	District-dependent
Street Trees	Both sides if required
Sidewalks	Both sides

J. MAIN STREET

70-ft ROW



Total ROW Width	70 ft
Pavement Width	36 ft
Traffic Movement	2-Way
Curb Radius	10 ft
Curb Type	2.5' Vertical
Drainage	Closed
Parking	Marked
Planter Type	Tree Well
Street Trees	Both sides if required
Sidewalks	Both sides

4.9 Sidewalk Program

A. Sidewalk Requirements

1. **Existing Streets:** As part of a proposed subdivision or new development along an existing publicly-maintained street, sidewalks shall be constructed along all applicable street frontages per the standards of Section 4.7 of this chapter.
2. **Infill Lots:** Sidewalk construction may not be required if the new development lot is considered an infill lot pursuant to Section 6.3.I, Infill Provisions, Sidewalk Compatibility Standards.
3. **New Streets:** As part of new street construction, sidewalks shall be constructed along both sides of the new street per the standards of Section 4.7 of this chapter.

B. Sidewalk Alternatives for Existing Streets

When the approving authority determines that the construction of a required sidewalk along an existing publicly-maintained street is unfeasible due to special circumstances, including but not limited to: impending road widening, significant street trees, severe roadside conditions, substandard street sections, or cost considerations; the approving authority shall require either: 1) a payment in lieu of sidewalk construction, 2) construction of an equal linear foot of sidewalk elsewhere within the applicable Planning District, or 3) a combination of the previous. In determining alternate sidewalk locations within the applicable Planning District, the approving authority shall consider elevated Sidewalk Priority Index scores.

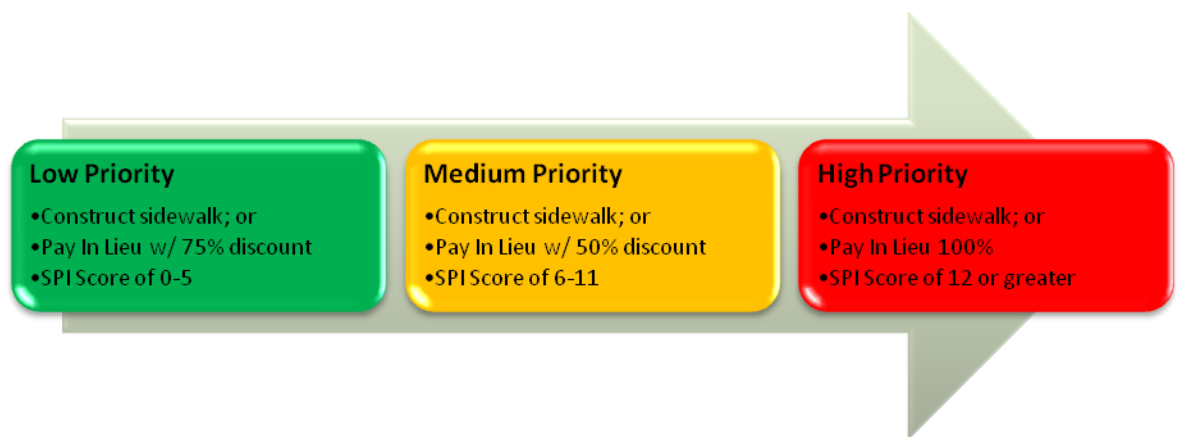
C. Sidewalk Payment In Lieu Program

As authorized under this section, a payment may be made to the City of Salisbury in lieu of sidewalk construction. The value of the payment shall equal the average linear foot sidewalk project cost, as determined on an annual basis by the Engineering & Development Services department of the City of Salisbury. The applicant is informed of the amount to be paid upon issuance of the zoning permit, or adoption of the ordinance for a Conditional District Overlay development, and payment shall be made prior to issuance of the Certificate of Occupancy.

Payments received in lieu of construction shall be assigned to one of nine (9) Planning Districts (as identified on the Sidewalk Priority Index Map (Appendix B of this LDO)) based on the location of the development seeking use of the payment in lieu program. These districts are areas in which payments shall be spent for the safety and convenience of pedestrians utilizing the sidewalk or pedestrian network within that district. Each district best follows census tract boundaries as well as representing, to the extent practical, an area where pedestrian circulation can take place without traversing major barriers, such as interstate freeways, major federal or state highways, railroad corridors, and significant streams or creeks which are, by definition, unsafe or unsuitable for pedestrian crossing.

The amount to be paid is determined by using the Sidewalk Priority Index (SPI) and the aggregate SPI street segment scores. The scores are prioritized Low, Medium, and High as follows:

1. **Low SPI Score = 0-5.** Street segments within this scoring range may either construct the required sidewalk or receive a 75% discount on the pay in lieu fee.
2. **Medium SPI Score = 6-11.** Street segments within this scoring range may either construct the required sidewalk or receive a 50% discount on the pay in lieu fee.
3. **High SPI Score = 12 or greater.** Street segments within this scoring range may either construct the required sidewalk or pay in lieu with no discount.



The Sidewalk Priority Index (SPI) is intended to ensure that sidewalks are first constructed or repaired where existing need is the greatest and where the potential for pedestrian traffic is the greatest. In general, pedestrian activity is directly attributable to factors, or pedestrian-generating characteristics, such as proximity to major destinations, specific zoning districts, and transit routes. By overlapping multiple characteristics, one can easily visualize the concentration of resources in a particular area. The cumulative intensity of all characteristics at a specific location determines the varying levels of prioritization. The SPI effectively adapts this methodology by identifying the specific characteristics that most affect the potential for walking in Salisbury. Those districts and pedestrian generating characteristics have been assigned the following values, and scores are determined for street segments based on aggregating overlapping characteristics:

1. All applicable zoning districts have been assigned a value according to the following table:

OSP RR	GR MHD	UR HR RMX	NMX CMX	DMX TND	IC	HS	HB LI HI
SPI n/a	SPI value of 0	SPI value of 1	SPI value of 2	SPI value of 3	SPI value of 2	SPI value of 1	SPI value of 0

2. The following are assigned a value of 3:
 - a. Colleges: Factors contributing to colleges generating heavy pedestrian activity include a young population, businesses that cater to students, and the fact that many students do not own automobiles. In addition, students, faculty, and staff often live nearby. Therefore, all street segments within 1/4-mile of all college campuses are assigned a value of 3.
 - b. Greenways & Parks: Greenways and parks attract recreational users of all ages. Greenways, specifically, are part of the pedestrian infrastructure itself and are used for transportation purposes. Additionally, Salisbury is unique in that all parks in the system, except for the Community Park, are accessible by foot and are all adjacent to an existing neighborhood. Therefore, all street segments within 1/4-mile of existing Greenways and parks are assigned a value of 3.
 - c. Transit: Almost all bus users begin and end their trips as pedestrians. Accordingly, safe and continuous pedestrian facilities are an integral component of a public transit system. Therefore, all street segments within 1/4-mile of a transit route are assigned a value of 3.
3. The following are assigned a value of 2:
 - a. High Schools: Based on the fact that elementary, middle, and high schools can generate many daily walking trips by students, whose ages typically make them among the most vulnerable pedestrians, all street segments within 1/4-mile of high schools are assigned a value of 2.
 - b. Historic Overlay: Based on the traditional grid street network, traditional medium-density platting, and the proximity of these district overlays to neighborhood service and support, all street segments within the overlay are assigned a value of 2.
4. The following are assigned a value of 1:
 - a. Civic Facilities: Because Salisbury's civic buildings provide services to a wide range of users, including children, senior adults, and disabled people, all street segments within a 1/4-mile of these facilities have been assigned a value of 1.
 - b. Commercial Nodes: Based on the potential for higher density housing and mixing of uses generally located in pods at significant intersections throughout the city, all street segments within 1/4-mile of the nodes are assigned a value of 1.
 - c. East Innes Gateway Overlay: Based on the spirit and intent of this separate overlay ordinance, the importance of the pedestrian and appropriately-scaled development assigns a value of 1 to the street segments within this district.

- d. Elementary & Middle Schools: Based on the fact that elementary, middle, and high schools can generate many daily walking trips by students, whose ages typically make them among the most vulnerable pedestrians, all street segments within 1/4-mile of elementary and middle schools are assigned a value of 1.
- e. Groceries & Health Clubs: Due to the current lack of regional commercial development in Salisbury, the majority of all grocery stores are still within the heaviest commercial nodes and adjacent to existing neighborhoods. Our large-scale grocery stores still have the advantage of serving the public in a manner similar to small-scale convenience. Regarding health clubs, Salisbury recognizes the importance of healthful living and becoming a more active community. Accordingly, all street segments within 1/4-mile of groceries and health clubs have been assigned a value of 1.
- f. Medical Facilities: Hospitals and smaller medical facilities in Salisbury are large employment centers, and two of which are located adjacent to well-established neighborhoods and transit facilities. This characteristic generates a considerable amount of pedestrian activity and transit use. Accordingly, all street segments within 1/4-mile of these facilities have been assigned a value of 1.
- g. Presence of Sidewalk: The presence of existing sidewalk within a scoring roadway segment has been assigned a value of 1. This factor recognizes that completing a sidewalk network and providing continuity of facilities generally has greater value to pedestrians.
- h. Thoroughfares: Thoroughfares are the most significant through-streets in a roadway system and provide direct access to many destinations. In addition, the speed and volume of motor vehicle traffic intensifies pedestrians need for separate facilities. Accordingly, Major and Minor Thoroughfares have been assigned a value of 1.

Scoring is determined along roadway segments – regardless of development or parcel size. This prevents individual major pedestrian-generating projects from coincidentally falling outside of many of the scoring characteristics and avoiding installation. In addition, it ensures continuity of the sidewalk network between “significant” intersections, railroad crossings, or other important features. The segment boundaries employed to determine the SPI score that are first encountered, in any combination, shall be as follows:

- 1. Signalized intersections
- 2. Four-way stop intersection
- 3. Two-way stop intersections
- 4. Railroad crossings
- 5. Or a distance of approximately 1/2-mile to the nearest intersection, crossing, or environmental feature if none of the above occur earlier

4.10 Connectivity & Street Stubs

Improving connectivity and limiting cul-de-sacs result in improved mobility for motorists, pedestrians, and cyclists; decreased response time for emergency services and delivery costs for services such as garbage collection through improved routing options; and, dispersion of motor vehicle traffic.

A Connectivity Index shall be used to determine the adequacy of street connectivity in new developments. The index is calculated as the ratio of the number of street links in a project's street layout (road sections between intersections or stubs to adjacent property) plus connections to existing streets divided by the number of street nodes (intersections and cul-de-sac heads).

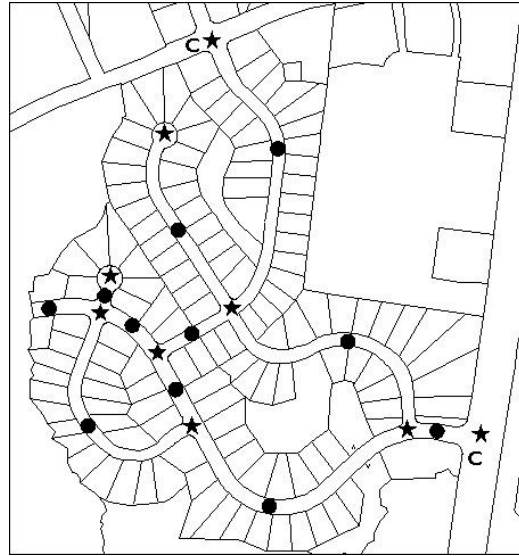
$$\text{Connectivity Index} = (\bullet + C) / \star$$

The illustration above illustrates a connectivity index of 1.44 (links are shown as circles, nodes are shown as stars, and connections to existing streets are shown as C's). The illustration has 11 links, 2 connections, and 9 nodes for an index of $(11+2) / 9 = 1.44$. In the illustration below, one cul-de-sac is converted to a full intersection. This gives the development one additional link for a connectivity index of 1.55 $([12 \text{ links} + 2 \text{ connections}] / 9 \text{ nodes})$. The same number of lots is shown in both illustrations.

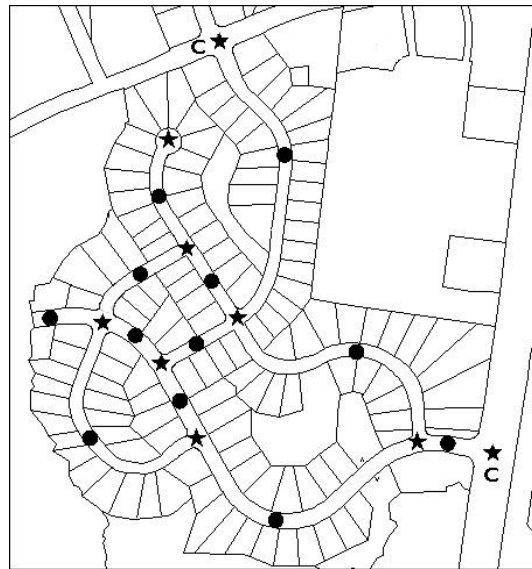
A. Connectivity Index Requirement

Any development shall be required to achieve a connectivity index as shown in the following table.

	OSP	RR LI HI	GR	UR, HR, RMX, TND, NMX, CMX, GEI-O, DMX	HS HB IC
Connectivity Index (Minimum)	n/a	1.3	1.4	1.5	n/a



A street layout showing a connectivity index of 1.44 $([11 \text{ links} + 2 \text{ connections}] / 9 \text{ nodes})$. Links are shown as circles and nodes are shown as stars and connections to existing streets are shown as C's.

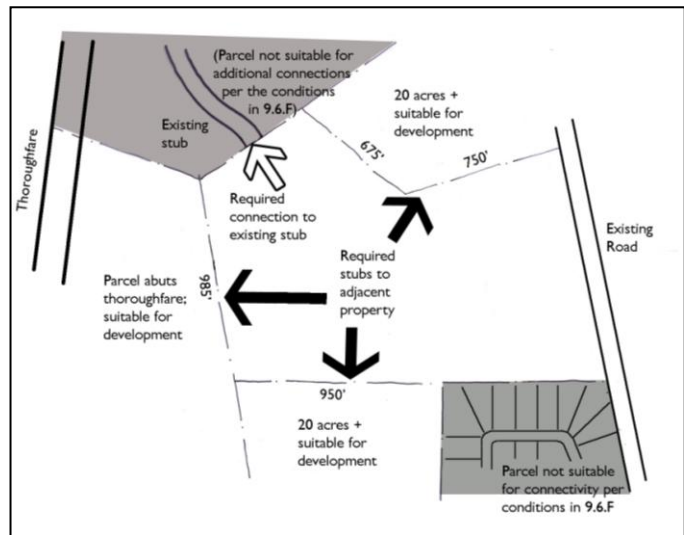


A street layout showing a connectivity index of 1.55 $([12 \text{ links} + 2 \text{ connections}] / 9 \text{ nodes})$. Note that one cul-de-sac from the original layout has been converted to a full intersection. The same numbers of lots are shown.

B. Street Stubs

1. Regardless of the following provisions of this subsection, street stubs are not required to connect properties located within the LI or HI districts to properties located within the OSP, RR, GR, UR, or HR districts.
2. Notwithstanding the above provision (4.10.B.1), all new development shall connect to any existing street stubs from adjacent properties.

3. The number of required street stubs is determined by calculating the cumulative linear feet of all property lines surrounding the proposed development contiguous with land that is suitable for development or redevelopment (as determined by the Administrator); dividing by 1200; and rounding to the nearest whole number.



Example (see diagram):

$$675' + 750' + 950' + 985' = 3160' / 1200 = 2.63 = 3 \text{ required stubs}$$

4. The location of new required stub street shall be prioritized as follows:
 - a. Adjacent parcels 20 acres or greater
 - b. Adjacent parcels that abut thoroughfares or collector streets
 - c. Where any adopted transportation or land use plan recommends a street connection
5. Where one or more of the following conditions would prevent practical connectivity, the adjacent property shall not be included in the calculation of required stubs:
 - a. Topographical conditions, where pre-development slopes are 15% or greater
 - b. Environmental conditions, such as a wetland, “blue-line” stream, or landfill
 - c. Controlled Access, such as a railroad or interstate

6. Stub streets and streets intended for extension during future phases shall be constructed to extend to the property line or as close to the line as practical. It shall be the responsibility of the second development to construct the connection to an existing stub street. Stub streets shall not exceed 150 feet in length without a paved turnaround.

4.11 Traffic Calming

- A. Vertical traffic calming treatments are prohibited.
- B. Horizontal traffic calming treatments, such as median islands, curb extensions, traffic circles, and roundabouts are encouraged and shall be designed and constructed in accordance with the City of Salisbury *Uniform Construction Standards Manual*.

4.12 Bicycle Accommodations – (RESERVED)

4.13 Access Management

Access management standards seek to preserve the traffic moving capability of the City's major streets, and in so doing, protect the investment of the taxpayer in the costs of road construction. Frequent driveways allow for unpredictable stops and vehicle turning movements, causing increased congestion, and greater opportunities for traffic accidents. The City does not wish to allow unnecessary driveway cuts to neutralize the value of road construction dollars provided by Federal, State and local taxpayers.

Access management standards that regulate the connection of driveways to the existing street system shall be as follows. Where the NCDOT *Driveway Manual* or *Median Crossover Guide* conflicts, the stricter of the two standards should prevail.

A. Driveway Number and Spacing (major thoroughfares only)

Parcel Frontage (feet)	Number of Driveways Allowed
< 500	1
501-999	2
>1000	3

B. Driveway Distance from Intersections

Street Type	Minimum Distance (feet)
Major	100
Collector Street/Minor Thoroughfare	50
Local	15

C. Median Opening Spacing

The minimum spacing between median openings on major thoroughfares shall be 1000 feet or as required by NCDOT.

4.14 Transportation Impact Analysis

The Transportation Impact Analysis (TIA) is a specialized study that evaluates the effects of a development's traffic on the surrounding transportation infrastructure. It is an essential part of the development review process to assist developers and government agencies in making land use decisions involving annexations, subdivisions, rezonings, special land uses, and other development reviews. The TIA helps identify where the development may have a significant impact on safety, traffic and transportation operations, and provides a means for the developer and government agencies to mitigate these impacts. Ultimately, the TIA can be used to evaluate whether the scale of development is appropriate for a particular site and what improvements may be necessary, on and off the site, to provide safe and efficient access and traffic flow.

- A. A TIA shall be required for a rezoning, subdivision plan, site plan, conditional use permit, certificate of zoning compliance, or preliminary plat for developments with an estimated trip generation of 3000 vehicles per day or greater during an average weekday based on a five day national average as defined in the ITE Trip Generation Manual.
- B. A traffic impact analysis report shall address the impact of projected horizon year (2 years after build-out by phase or entire development as appropriate) traffic volumes. It shall identify the methodology used to evaluate the impact. The weekday peak hour impact shall be evaluated as well as the Saturday peak hour for those uses exhibiting high levels of weekend traffic generation.

Trip Generation:

The sum of the number of inbound and outbound vehicle trips that are expected for the type and size of the proposed land use. For purposes of determining the requirement to submit a TIA, adjustments such as modal split, pass-by trips, and internal capture rates will be allowed to reduce the site traffic calculation.

Note: Typically the following developments meet or exceed the 3000 vehicles per day threshold:

- 55,000 sf Retail
- 300 Single family homes
- 250,000 sf Office
- 400,000 sf Industrial
- 350 room Hotel

- C. Based on the findings of the analysis, if a proposed development does not meet the applicable service level standards, the applicant shall be required to upgrade the facilities in accordance with the adopted level of service program. Mitigation measures may involve strategies other than roadway construction or other physical improvements such as changes to traffic signal timing or phasing, and transportation management strategies.
- D. **Thresholds for Mitigation:** The City requires consideration of roadway and/or operational improvements when the proposed development increases the intersection Volume-to-Capacity Ratio (V/C) beyond the thresholds indicated in the table below. The City evaluates the impacts of proposed development at intersections (primarily under existing year conditions) based on the increase in V/C ratio as a result of the projected site traffic. This increase is determined by comparing the V/C ratio under existing development conditions and proposed development conditions. For the purposes of this comparison, all un-signalized intersections are analyzed as signalized intersections.

Existing V/C	Allowable Increase in V/C By Development
0.00 – 0.60	0.10
0.61 – 0.70	0.07
0.71 – 0.80	0.05
0.81 – 0.90	0.03
0.91 – 1.00+	0.02

- E. Payment-in-Lieu:** The City Council may, at its discretion, accept either mitigation measures to be completed by the developer or a fee paid to the City in lieu of mitigation. The fee shall be equal to the costs of the required mitigation measures, as determined by the Administrator. A combination of mitigation measures and payments-in-lieu of dedication may be permitted. Payments in lieu of dedication shall be approved as part of the Development Plan.
- F.** A TIA will vary in range and complexity depending on the type and size of the proposed development. The procedures for a TIA are outlined in Section 15.23. The TIA requirements as described in Section 16.13 may be modified by the Administrator.

This page intentionally left blank.